

Code No: RT41054

R13

Set No. 1

IV B.Tech I Semester Supplementary Examinations, July/Aug - 2021

SOFTWARE TESTING METHODOLOGIES

(Computer Science and Engineering)

Time: 3 hours

Max. Marks: 70

Question paper consists of Part-A and Part-B

Answer ALL sub questions from Part-A

Answer any THREE questions from Part-B

PART-A (22 Marks)

1. a) What are states of a bug? Explain. [3]
- b) How to verify code? Explain. [3]
- c) What are various kinds of loops? Explain. [4]
- d) What is alpha testing? Explain. [4]
- e) What are quality factors? Explain. [4]
- f) Write a note on object oriented testing? [4]

PART-B (3x16 = 48 Marks)

2. a) Take a project and identify the test activities according to SDLC phases. [8]
- b) What are evolution phases of software testing? Explain. [8]
3. a) How to verify requirements and objectives? Explain in detail. [8]
- b) A program takes as input a string(5-20 characters) and a single character and checks whether the single character is present in the string or not. Design test cases for this program using BVC, robust testing, and worst case testing methods. [8]
4. a) Explain in detail about graph matrices. [8]
- b) Take a small project and apply all the static testing techniques on its SRS, SDD and code. [8]
5. a) Briefly explain about decomposition-based integration. [8]
- b) Discuss about regression testing techniques. [8]
6. a) What is test case prioritization? Explain its types. [8]
- b) Distinguish between execution slice and dynamic slice with examples. [8]
7. a) Explain the guidelines for automated testing. Write the advantages of automated testing. [8]
- b) Discuss the challenges in testing for web based software. [8]